# SUMMARY SCORESHEET FOR COMPUTING PROJECTED HRS SCORE

SITE NAME:	M. Stephens Manufacturing									
CITY:	Cudahy	COUNTY:	Los Angeles							
EPA ID #:	CAN000909569	EVALUATOR:	Brian P. Reilly							
PROGRAM ACCO	JNT #:	DATE:	09/29/17							
LAT/LONG:	33° 57' 22.6" N / 118° 10' 59.5" W	<u></u>								
THIS SCORESHEE	T IS FOR A PA:	SI:	X							
	OTHER:									
RCRA STATUS (ch	rator			P, BKLG, ERAP,						
TSDF			ARF (Date):	-						
	isted in RCRA Database as of b: 08/08/17	X No State Superfund Status (Date): 08/08/17								
			S Pathway	S2 Pathway						
Groundwater M	ligration Pathway Score (Sgw)		0.00	0.00						
Surface Water	Migration Pathway Score (Ssw)		*	*						
Soil Exposure I	Pathway Score (Ss)		*	*						
Air Migration P	athway Score (Sa)		*	*						
(Sgw2 + Ssw2	+ Sse2 + Sam2)			*						
(Sgw2 + Ssw2	+ Sse2 + Sam2) / 4			*						
$\sqrt{(Saw2 + Sew2)}$	+ Sse2 + Sam2) / 4			*						

Surface Water: Surface water runoff is expected to infiltrate into the unpaved surfaces of the site with the excess flowing into curbside municipal stormwater drains located on adjacent public roadways (i.e., Atlantic Avenue and/or Patata Street). No drinking water intakes are associated with surface water within 15 miles downstream of the site. However, there is the potential for fisheries and/or sensitive environments associated with the Pacific Ocean to exist within this target distance limit.

Soil Exposure and Air: There are no known residences, schools, daycare facilities, or sensitive environments on site. In addition, the site is fenced. The majority of the surface of the site was either unpaved or covered by heavily-weathered asphalt. The nearest residential property to the site was located approximately 0.18 mile north. There are no regularly occupied workplaces on site.

<sup>\*</sup> Pathway evaluated, but not assigned a score (explain):

## **GROUNDWATER MIGRATION PATHWAY SCORESHEET**

1.919	l of Boloon	Maximum	0	Detionals	Data
	of Release	Value	Score	Rationale	Quality
	ed Release	550	0	1	<u>H</u>
	al to Release	10	10	2	<b>.</b>
2a.	Containment	10	10	2	<u>E</u>
2b.	Net Precipitation Value	10	3	3	<u>H</u>
2c.	Depth to Aquifer Value	5	1	4	<u>H</u>
2d.	Travel Time	35	5	5	<u>H</u>
2e.	Potential to Release	500	90		
2 1 :1:01:16	[lines 2a x (2b+2c+2d)]	550	00		
3. Likeiin	ood of Release (line 1 or 2e)	550	90		
Waste Cha	aracteristics				
4. Toxicit	y/Mobility	(a)	0	6	Н
5. Hazard	ous Waste Quantity	(a)	0	7	Н
6. Waste	Characteristics	100	0		
(lines	s 4 x 5, then use Table 2-7)				
Targets					
7. Nearest Well Value		50	18	8	Н
8. Popula	tion				
8a.	Level I Concentrations	(b,c)	0	9	Н
8b.	Level II Concentrations	(b,c)	0	9	Н
8c.	Potential Contamination	(b,c)	9,223.00	9	Н
8d.	Population (lines 8a+8b+8c)	(b)	9,223.00		
9. Resour	ces	5	0	10	Е
10. Wellhe	ad Protection Area	20	0	11	E
11. Targets	s (lines 7+8d+9+10)	(b)	9,241.00		
Aquifer So	ore				
12. Aquife	r Score [(lines 3 x 6 x 11)/82500,	100	0.00		
	t to a Maximum of 100]				
GROUNDW	VATER MIGRATION PATHWAY SO	CORE			
13. Pathwa	y Score (Sgw)	100	0.00		
	st score from line 12 for all aquifers				

<sup>(</sup>a) Maximum value applies to waste characteristics category.

evaluated, subject to a maximum of 100)

AQUIFER EVALUATED Sunnyside Aquifer

<sup>(</sup>b) Maximum value not applicable.

<sup>(</sup>c) Value computed on attached calculation sheet.

# **GROUNDWATER PATHWAY CALCULATIONS FOR POPULATION**

### **ACTUAL CONTAMINATION**

Well Identifier	Contaminant Detected	Contaminant Concentration (µg/L)	Benchmark (µg/L)	Level Multiplier* (A)	Apportioned Population Well Serves (B)	Actual Contamination Factor (A x B)				
SUM LEVEL I CONCENTRATIONS										
* Level Multipliers: SUM LEVEL II CONCENTRATIONS										

Level I = 10. Level II = 1.

## POTENTIAL CONTAMINATION

	Number	Population	Distance
	of Wells	Served by	Weighted
	Within	Wells Within	Population Values
Distance Ring (Miles)	Distance Ring	Distance Ring	(Table 3-12)
0.00 to 0.25	0	0	0.00
>0.25 to 0.50	1	3,750	3,233.00
>0.50 to 1.00	7	64,903	16,684.00
>1.00 to 2.00	12	74,867	9,385.00
>2.00 to 3.00	22	127,520	21,222.00
>3.00 to 4.00	43	303,519	41,709.00
	92,233.00		
POTENTIAL CO	9,223.30		

AQUIFER EVALUATED Sunnyside Aquifer

## HRS RATIONALE M. Stephens Manufacturing EPA ID NO.: CAN000909569

1. The M. Stephens Manufacturing (M. Stephens) site is officially located at 8420 Atlantic Ave., Cudahy, Los Angeles County, California. The site comprises eight County parcels and multiple additional addresses are associated with the site. The approximately 6-acre site is located in an urban industrial area. The site is located less than one-quarter mile from residential properties.

Between the late 1940s and the mid-1980s, historical operations at the site included metal fabrication, electric parts manufacturing, and tool manufacturing. From the mid-1980s through 2003, the site was used by the M. Stephens Manufacturing Company for die-cast electrical parts manufacturing. Since 2003, no significant operations have been conducted at the site. The southeastern approximately 3 acres of the site are owned by the City of Cudahy.

Three underground storage tanks (USTs), a hydraulic car-hoist, and a subgrade clarifier were historically located on site. The USTs were reportedly used to store petroleum products. By 1995, all three USTs and the car-hoist had been removed from the site. The clarifier was removed in 2007. Waste containing tetrachloroethylene (PCE) was historically generated at the site. No additional information is known regarding specific on-site historical operations, hazardous substances, or hazardous substance management practices.

In 2005, a private party interested in acquiring the property conducted a subsurface soil investigation at the site. PCE was identified at low, but detectable, concentrations in shallow soil adjacent to the former clarifier. No additional elevated concentrations of metals or volatile organic compounds (VOCs) were reported during the investigation. No soil vapor or groundwater samples were collected during the investigation.

Prior to the 2015 Preliminary Assessment (PA), the U.S. Environmental Protection Agency (EPA) has had no historical involvement with the site. With the exception of a leaking UST case and various discharge permit requirements related to the former clarifier, no state or local regulatory agency has had any significant historical involvement with the site.

In November 2015, Weston Solutions, Inc. (WESTON), on behalf of EPA, conducted the Site Inspection (SI) at the site. During the SI, WESTON collected soil matrix source samples at depths up to 15 feet (ft) below ground surface (bgs) from nine on-site borings, collected groundwater release samples at depths up to 128 ft bgs from three on-site borings and one off-site boring, and collected secondary objective groundwater samples from two on-site and two off-site borings.

For the purposes of this SI, the Gaspur aquifer beneath the site is defined as being between 55 and 75 ft bgs. Water-bearing units identified at shallower depths are defined as being associated with one or more perched (or semiperched) aquifers. The Exposition aquifer is defined as being between 75 and 170 ft bgs; however, the base of this aquifer is considered approximate because no information was found regarding site-specific lithology below approximately 135 ft bgs. See section 4.2.1 of the SI Report for a more detailed description of the aquifers underlying the site.

Soil matrix samples collected from Boring MSM-DP-2, which is located at the central portion of the site, are designated as background soil samples for Hazard Ranking System (HRS) purposes. The assigned background concentration for each analyte was determined by amalgamating the concentration data from each of the four discrete-depth soil samples. For any analyte with a reported method detection limit (MDL) exceedance in the dataset, the background concentration was conservatively assigned as the arithmetic mean plus three times the standard deviation. For any analyte without an MDL exceedance, the background concentration was conservatively assigned as the maximum sample quantitation limit (SQL) value within the dataset.

On-site soil matrix samples collected during the 2015 SI investigation exhibited concentrations of metals, specifically antimony, barium, cadmium, and lead, and VOCs, specifically PCE, that exceeded assigned site-specific action levels. However, these elevated concentrations were limited to near-surface samples (i.e., 2 ft bgs), the exhibited concentrations only slightly exceeded action levels; and none of these analytes were identified at elevated concentrations, as compared to documented federal and/or state regulatory benchmarks, in on-site groundwater samples. Therefore, these results are not considered to represent a significant metal or VOC source area. For HRS purposes, no on-site hazardous substance sources are considered adequately documented.

Groundwater release samples collected during the investigation exhibited elevated concentrations of metals and VOCs. Maximum concentrations include arsenic at 13 micrograms per liter ( $\mu$ g/L) and trichloroethylene (TCE) at 29  $\mu$ g/L. The federal Maximum Contaminant Levels (MCLs) for arsenic and TCE are 10  $\mu$ g/L and 5.0  $\mu$ g/L, respectively.

Hazardous substance sources at the site have not been adequately documented based on the results of the 2015 SI sampling effort. Consequently, a release of hazardous substances from the site to groundwater cannot be established. The site is scored using the deepest known aquifer, the Sunnyside aquifer. An observed release factor value of 0 is assigned per section 3.1.1 in the HRS Final Rule.

A data qualifier of "H" is assigned since an observed release was not established and since the analytical data were validated by the EPA Region 9 Quality Assurance Office.

HRS SI Rationale CAN000909569

#### References:

- Converse Consultants; Limited Phase II Environmental Site Assessment Report, Intermatic Complex; 06 October 2005.
- County of Los Angeles, Department of the Assessor; *Property Information*, *Assessor's ID Nos.* 6224-034-010, 6224-034-036, 6224-034-037, 6224-034-039, 6224-034-900, 6224-034-901, 6224-034-902, and 6224-034-903, *Parcel Map* 6224 *Sheet* 34; <a href="http://maps.assessor.lacounty.gov/mapping/viewer.asp">http://maps.assessor.lacounty.gov/mapping/viewer.asp</a>; data extracted 31 July 2017.
- County of Los Angeles, Department of Public Works; Letter addressed to Fred C. Wassan, Agoura Realty & Management, Re: Industrial Waste Pretreatment Facility, Closure Certification South Atlantic; 21 June 2007.
- County Sanitation Districts of Los Angeles County; *Investigation Report, I* 09201734W; 08 April 1992.
- Department of Toxic Substances Control; Hazardous Waste Tracking System (HWTS) Reports Search Results, 8420 Atlantic Ave, 8420 S Atlantic Ave, 4839 Patata St; <a href="http://hwts.dtsc.ca.gov/report\_list.cfm">http://hwts.dtsc.ca.gov/report\_list.cfm</a>; data extracted 07 August 2017.
- Department of Water Resources, State of California; Bulletin No. 104, Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County, Appendix A, Ground Water Geology; June 1961.
- Google Earth; 33.956267, -118.183203, 30 May 1994, 30 July 2007, 18 October 2016; <a href="http://earth.google.com">http://earth.google.com</a>; data extracted 31 July 2017.
- U.S. Environmental Protection Agency; Envirofacts Warehouse, TRI query results; *M Stephens Manufacturing*; <a href="https://www.epa.gov/enviro/trisearch">https://www.epa.gov/enviro/trisearch</a>; data extracted 01 August 2017.
- Weston Solutions, Inc.; Preliminary Assessment Report, M. Stephens Manufacturing, Inc. (EPA ID No.: CAN000909569); April 2015.
- 2. The historical hazardous substance containment practices used at the site, if any, could not be adequately determined at this time. A default containment factor value of 10 is assigned per section 3.1.2.1 and Table 3-2 in the HRS Final Rule.
  - A data qualifier of "E" is assigned since historical hazardous substance containment practices are not known.
- 3. A net precipitation value of 3 is assigned per section 3.1.2.2 and Figure 3-2 in the HRS Final Rule.
  - A data qualifier of "H" is assigned since the net precipitation factor value is adequately documented.
- 4. Groundwater beneath the site is typically found within the coarser-grained sediments of the Holocene alluvium (Gaspur aquifer), the upper Pleistocene Lakewood Formation (Exposition and Gage aquifers), and the lower Pleistocene San Pedro Formation (Hollydale, Jefferson, Lynwood, Silverado, and Sunnyside

HRS SI Rationale CAN000909569

aquifers). The State of California, Department of Water Resources (DWR) Bulletin No. 104 (*Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County*) – Appendix A (Bulletin 104) presents "idealized" geologic cross-sections transecting the Central Subbasin. Cross-section B-B' transects the southern portion of the site. The estimated elevations and depths of the aquifers underlying the site are presented in Table 1.

The Bulletin 104 cross-sections were also used to identify apparent areas of merged aquifers near the site, including approximately 0.5 mile west (Gaspur-Exposition), at the southwestern portion of the site (Exposition-Gage), and approximately 0.75 mile east-southeast (Lynwood-Silverado). Aquifer interconnection within 2 miles of the site has been documented between the Gaspur through Gage and between the Lynwood through Silverado. Aquifer interconnections within 2 miles of the site have been established neither between the Gage through Jefferson, the Jefferson and Lynwood, nor the Silverado and Sunnyside.

The Sunnyside aquifer was evaluated, which at the site is estimated to extend from approximately 1075 ft bgs through at least 1330 ft bgs. A depth to aquifer factor value of 1 is assigned per section 3.1.2.3 and Table 3-5 in the HRS Final Rule.

A data qualifier of "H" is assigned since the depth to the top of the evaluated aquifer is adequately documented and well exceeds the threshold of 250 feet.

#### References:

Department of Water Resources, State of California; Bulletin No. 104, Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County, Appendix A, Ground Water Geology; June 1961.

Department of Water Resources, State of California; California's Groundwater Bulletin 118, Coastal Plain of Los Angeles Groundwater Basin, Central Subbasin; 27 February 2004.

1330

**Estimated Elevation** Estimated Depth (ft amsl) (ft bgs) Aquifer Top Top Base Base 55 Gaspur 75 50 30 Exposition 25 -65 80 170 Gage -80 185 245 -140 350 Hollydale -200 -245 305 Jefferson -290 -350 395 455 Lynwood -380 -460 485 565 Silverado -490 -695 595 800

Table 1: Bulletin 104 Aguifer Elevations near Site

-970

amsl = above mean sea level bgs = below ground surface

Sunnyside

References: DWR, 1961 1075

-1225

5. Based on the data collected during the SI investigation, subsurface materials between the surface and 15 ft bgs primarily consisted of light- to dark-brown medium-grained sands through silty sands with interbedded lenses (typically less than 2 ft) of light- to dark-brown sandy silts through silts. The lithological identifications are described in the sample log book (Appendix I of the SI Report). Additionally, the interpreted Soil Behavior Type generated from the Cone Penetration Testing (CPT) borings, which extended to a total depth of 135 ft bgs, generally indicated sand units from 30 to 38 ft bgs, 58 to 70 ft bgs, 75 to 90 ft bgs, and 119 to 135 ft bgs. Between these sand units, the soils were generally composed of silts and clays with thin (i.e., less than 2 ft) interbedded lens of coarser-grained materials. The CPT Lithological Profile Reports are presented in Appendix E of the SI Report.

The geologic materials between the ground surface and the top of the Sunnyside aquifer, as described in Bulletin 104, are generally characterized by confined aquifer systems, which are composed of relatively permeable sands through gravels and are separated by relatively impermeable clay through silt layers. Based on this description and Table 3-6 in the HRS Final Rule, a hydraulic conductivity factor of 10<sup>-6</sup> is assigned for the permeable units (i.e., aquifers) and a hydraulic conductivity factor of 10<sup>-6</sup> is assigned for the less permeable units (i.e., aquicludes). Based on the estimated elevations and depths of the aquifers underlying the site (see Table 1), the combined thickness of the units with the lower hydraulic conductivity of 10<sup>-6</sup> is approximately 500 feet. A travel time factor value of 5 is assigned per section 3.1.2.4 and Table 3-7 in the HRS Final Rule.

A data qualifier of "H" is assigned since the combined thicknesses and compositions of the multiple aquicludes underlying the site are adequately

documented and since this combined thickness well exceeds the next tier threshold thickness of 100 feet.

#### Reference:

Department of Water Resources, State of California; Bulletin No. 104, Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County, Appendix A, Ground Water Geology; June 1961.

6. Based on the results of the SI Investigation and a review of available historical operational information, no significant hazardous substances sources were identified at the M. Stephens site. A toxicity/mobility factor value of 0 is assigned per section 3.2.1.3 and Table 3-9 in the HRS Final Rule.

A data qualifier of "H" is assigned since the analytical data were validated by the EPA Region 9 Quality Assurance Office.

7. Based on the results of the SI Investigation and a review of available historical operational information, no significant hazardous substances sources were identified at the M. Stephens site. A hazardous waste quantity factor value of 0 is assigned per section 2.4.2.2 in the HRS Final Rule.

A data qualifier of "H" is assigned since no hazardous substances sources were documented at the site.

8. Groundwater beneath the site is typically found within the coarser-grained sediments of the Holocene alluvium (Gaspur aquifer), the upper Pleistocene Lakewood Formation (Exposition and Gage aquifers), and the lower Pleistocene San Pedro Formation (Hollydale, Jefferson, Lynwood, Silverado, and Sunnyside aquifers). The regional groundwater flow direction near the site, which was calculated using data from wells screened within the upper San Pedro Formation (Lynwood and Silverado aquifers), is generally to the southwest with local and temporal variations from approximately west-southwest to southeast. The estimated elevations and depths of the aquifers underlying the site are presented in Table 1.

Aquifer interconnection within 2 miles of the site has been documented between the Gaspur through Gage and between the Lynwood through Silverado. Aquifer interconnections within 2 miles of the site have been established neither between the Gage through Jefferson, the Jefferson and Lynwood, nor the Silverado and Sunnyside.

The Sunnyside aquifer was evaluated, which at the site is estimated to extend from approximately 1075 ft bgs through at least 1330 ft bgs. Per section 3.3.1 of the HRS Final Rule, when evaluating the nearest well factor value, include both wells drawing from the aquifer being evaluated as well as those drawing from overlying aquifers. Since the evaluated aquifer is the deepest known aquifer used

for drinking water wells within the target distance limit (TDL), all wells within the TDL, regardless of the sourced aquifer, were considered in the determination of the nearest well factor value.

The nearest active or maintained-standby drinking water well to the site is Well 03. This well is operated by the Tract 349 Mutual Water Company (MWC) and is located approximately 0.26 mile to the northwest of the site. Well 03 is a multi-aquifer well with six distinct screening intervals that correlate to the estimated depths of the Silverado and Sunnyside aquifers. Using the calculated distance between this well and the nearest on-site source area, a nearest well factor value of 18 is assigned based on section 3.3.1 and Table 3-11 in the HRS Final Rule.

A data qualifier of "H" is assigned since the status and location of Well 03 is adequately documented.

#### References:

- Barber-Bridge Drilling Corp.; Well Log, *Tract 349 Mutual Water Co., Well No. 3*; 15 March 1948.
- Department of Water Resources, State of California; Bulletin No. 104, Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County, Appendix A, Ground Water Geology; June 1961.
- Google Earth; *33.956267*, *-118.183203*, *30 May 1994*, *30 July 2007*, *18 October 2016*; http://earth.google.com; data extracted 31 July 2017.
- Water Replenishment District of Southern California; *Engineering Survey and Report*; 02 March 2017.
- Weston Solutions, Inc.; Drinking Water Wells GIS Report, M. Stephens Manufacturing, Inc. December 2016.
- 9. There are 85 known active drinking water wells and 4 known maintained-standby wells that are operated by 23 distinct water purveyors located within the TDL (i.e., 4 miles of established on-site sources). All 85 of the active wells, which serve an apportioned population of approximately 575,000, were evaluated. The 4 known maintained-standby wells were not included in the evaluation since their inclusion did not increase the population factor value per section 3.3.2 of the HRS Final Rule.

Water purveyors known to operate wells within the TDL include Tract 349 MWC, City of Huntington Park, City of South Gate, Tract 180 MWC, Golden State Water Company (GSWC) – Bell/Bell Gardens, Maywood MWC No. 3, Rancho Los Amigos Hospital, City of Downey, City of Bell Gardens, Maywood MWC No. 1, City of Lynwood, Maywood MWC No. 2, GSWC – Hollydale, Walnut Park MWC, City of Vernon, City of Commerce, City of Compton, CalWater Service – East Los Angeles (ELA), GSWC – Florence/Graham, Lynwood Park MWC, GSWC – Willowbrook, Park Water Company (Liberty) – Compton/Willowbrook, and Sativa LA Central Water District (CWD). The

HRS SI Rationale CAN000909569

drinking water well information for the public systems and the groundwater apportionment calculations are presented in Table 2.

The Sunnyside aquifer was evaluated, which at the site is estimated to extend from approximately 1075 ft bgs through at least 1330 ft bgs. Per section 3.3.2 of the HRS Final Rule, when evaluating the population factor, count those persons served by wells in the evaluated aquifer and those persons served by wells in overlying aquifers. Since the evaluated aquifer is the deepest known aquifer used for drinking water wells within the TDL, all persons served by wells within the TDL, regardless of the sourced aquifer, were considered in the determination of the population factor value.

Since an observed release to the Sunnyside aquifer has not been established for the site, both the Level I concentration factor and the Level II concentration factor were assigned a 0 per section 3.3.2.1 of the HRS Final Rule.

A potential contamination factor value of 9,223 is assigned based on section 3.3.2.4 and Table 3-12 in the HRS Final Rule.

A data qualifier of "H" is assigned since the status and location of evaluated wells is adequately documented.

#### References:

- California Water Service; California Water Service, 2015 Urban Water Management Plan, East Los Angeles District; June 2016.
- Civiltec Engineering, Inc.; City of Vernon, 2010 Urban Water Management Plan, Volume 1 Report; June 2011.
- Department of Water Resources, State of California; Bulletin No. 104, Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County, Appendix A, Ground Water Geology; June 1961.
- Kennedy/Jenks Consultants; Golden State Water Company, 2015 Urban Water Management Plan, Bell/Bell Gardens; July 2016.
- Kennedy/Jenks Consultants; Golden State Water Company, 2015 Urban Water Management Plan, Florence-Graham; July 2016.
- Maddaus Water Management, Inc.; Liberty Utilities (Park Water) Corp., 2015 Urban Water Management Plan, Final; 24 June 2016.
- Risk Management Professionals, Inc.; City of Compton, 2010 Urban Water Management Plan; June 2011.
- SA Associates; City of Lynwood, 2010 Urban Water Management Plan; July 2011.
- State Water Resources Control Board, State of California; Safe Drinking Water Information System; California Public Water Supply Systems query results: Tract 349 Mutual Water Co., Huntington Park-City Water Dept., South Gate-City Water Dept., Tract 180 Mutual Water Co., GSWC Bell, Bell Gardens, Maywood Mutual Water Co. #3, Rancho Los Amigos Hospital, Maywood Mutual Water Co.

#1, Downey - City Water Dept., Lynwood-City Water Dept., Liberty Utilities - Bell Gardens, Maywood Mutual Water Co. #2, Walnut Park Mutual Water Co., GSWC - Hollydale, Vernon-City Water Dept., GSWC - Florence/Graham, Compton-City Water Dept., Commerce-City Water Dept., Lynwood Park Mutual Water Co., California Water Service Co. - ELA, GSWC - Willowbrook, Liberty Utilities - Compton, Sativa-L.A. CWD; https://sdwis.waterboards.ca.gov/PDWW/; data extracted 13 April 2017.

Stetson Engineers, Inc.; City of Downey, 2010 Urban Water Management Plan; January 2012.

Weston Solutions, Inc.; Drinking Water Wells - GIS Report, M. Stephens Manufacturing, Inc. December 2016.

10. The site is located in an urban industrial area. It is not known if wells located within the target distance limit are used for commercial food crop irrigation, commercial livestock watering, commercial food preparation, commercial aquaculture supply, or a water recreation area supply. For conservative HRS scoring purposes, a resources factor value of 0 is assigned based on section 3.3.3 in the HRS Final Rule.

A data qualifier of "E" is assigned since documentation regarding specific usages of non-drinking water wells was not reviewed during this investigation.

11. It is not known if there are designated wellhead protection areas (WPA) near the site. There is a potential for a designated WPA to be located within the target distance limit; however, since documentation regarding WPA locations was not reviewed during this SI, a WPA factor value of 0 is assigned based on section 3.3.4 in the HRS Final Rule.

A data qualifier of "E" is assigned since documentation regarding specific usages of non-drinking water wells was not reviewed during this investigation.

M. Stephens Manufacturing September 2017

Table 2	Table 2: Groundwater Population Apportionment Calculations																									
	Blended Drinking Water System Purveyor																									
	Number of Wells Operated by Each Purveyor Within 4 Miles of the Site															j /	Population	Distance								
Distance Ring (Miles)	Tract 349 Mutual Water Company	City of Huntington Park	City of South Gate	Tract 180 Mutual Water Company	GSWC - Bell, Bell Gardens	Maywood Mutual Water Company #3	Rancho Los Amigos Hospital	City of Downey	City of Bell Gardens	Maywood Mutual Water Company #1	City of Lynwood	Maywood Mutual Water Company #2	GSWC - Hollydale	Walnut Park Mutual Water Company	City of Vernon	City of Commerce	City of Compton	CWSC - ELA	GSWC - Florence/ Graham	Lynwood Park MWC	GSWC - Willowbrook	PWC (Liberty) - Compton/ Willowbrook	Sativa LA CWD	Total Number of Wells Within Distance Ring	Within Distance	Weighted Population Values (HRS Table 3-12)
0 to .25																								0	0	0.00
>.25 to 0.5	1																							1	3750	3233.00
>0.5 to 1		1	4	2																				7	64903	16684.00
>1 to 2	1	2	1		4	1	2	1																12	74867	9385.00
>2 to 3		1	2		1	1	1	4	1	2	2	2	1	3	1									22	127520	21222.00
>3 to 4		1						11			3		1		4	2	3	5	6	3	2	1	1	43	303519	41709.00
								Т	otal Number	r of Wells an	d Imported	Water Intak	es Supplyin	g Each Syster	m										SUM:	92233.00
GW Wells:	2	5	7	2	5	2	3	20	1	2	5	2	2	3	7	2	7	9	7	3	2	1	3		SUM/10:	9223.30
Imported:	0	1	1	0	1	1	0	0	0	1	1	1	0	1	1	0	1	1	1	0	1	1	0		Potential	
Total:	2	6	8	2	6	3	3	20	1	3	6	3	2	4	8	2	8	10	8	3	3	2	3		Contamination	9223.30
										Percent Imp	oorted Wate	r Supplying	Each System	1											Factor Value:	
	1	28	1	0	3	8	0	0	0	5	2	20	0	27	16	0	29	37	18	0	<40	64	0			
										Total Po	pulation Se	rved by Each	n System													
Total:	7,500	17,246	96,057	14,000	58,048	9,500	8,800	112,585	11,879	3,619	65,965	6,700	7,666	16,180	45,000	3,828	81,965	150,729	65,182	2,300	10,682	24,698	6,837			
GW Portion:	7,500	17,246	96,057	14,000	58,048	9,500	8,800	112,585	11,879	3,619	65,965	6,700	7,666	16,180	45,000	3,828	81,965	150,729	65,182	2,300	10,682	8,891	6,837			
	Apportioned Population Served by Each Intake																									

3,750 2,874 12,007 7,000 9,675 3,167 2,933 5,629 11,879 1,206 10,994 2,233 3,833 4,045 5,625 1,914 10,246 15,073 8,148 767 3,561 8,891 2,279